

DEPARTMENT OF WATER AND POWER  
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March 29, 1983

Mr. James H. Anthony  
Project Director  
Intermountain Power Project  
931 General Office Building

Meeting With the Utah Department of Health (DOH)  
Regarding Modification of  
the Intermountain Power Project (IPP)  
Air Quality Permit

On March 9, 1983, Messrs. Ronald L. Nelson (IPP Project Office), James J. Carnevale (Mechanical Engineering Section), Roger T. Pelote (Advanced Projects, Environmental and Regulatory Affairs (APER)), Timothy L. Conkin (APER), Stephen A. Clark (APER), and James Holtkamp (Utah legal counsel to IPP) met in Salt Lake City, Utah, with Messrs. Brent C. Bradford (Director, Bureau of Air Quality), Burnell Cordner (Assistant Director, Bureau of Air Quality), Montie Keller (Environmental Health Manager) and David Kopta (Public Health Engineer) of the DOH to discuss concerns pertaining to the IPP air quality permit. The attached confidential draft IPP letter responding to the September 3, 1982 DOH letter addressed to you was discussed at the meeting. The following are Department comments on the DOH position and a summary of the issues discussed at the meeting.

1. Department Comments on the DOH Position:

- a. The DOH has misinterpreted the legal definitions of "source" and "new" versus "existing" source. These definitions are basic to the Department's position that no emission control equipment shall be subject to a new review incorporating the need for compliance with current 1983 Best Available Control Technology (BACT). The current 1983 BACT should not be required for IPP due to design modifications because these modifications result in a net decrease in emissions and impacts.

A "source" as defined for IPP is the entire generating station rather than each generating unit. Therefore, a design modification from four to two generating units will offset the increase in individual generating unit emissions caused by the increase in heat input to the boilers. The result is a significant net decrease in emissions which allows IPP to avoid the major modification review discussed in 2.d below.

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The IPP is an "existing" and not a "new" source. A source is existing when it has "all necessary pre-construction approvals or permits" (Utah Air Conservation Regulations (UACR), August 1981) and has "entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time" (UACR, August 1981). An "existing" source must only comply with BACT which was determined for that source (including a public comment period) prior to the time the source is considered existing. The IPP became an existing source when the conditions stated above were satisfied.

Since IPP is an existing source, any design modification such as the changes from an electrostatic precipitator (ESP) to a baghouse and from lime to limestone for the SO<sub>2</sub> scrubber can only be scrutinized in terms of the previous permit application BACT review. The modified emission control equipment need only be as good as that which was approved by the DOH prior to issuance of the December 1983 approval order. Current 1983 BACT does not apply to IPP, contrary to the DOH position discussed in 1.e below. However, the DOH can set more stringent emission limits and removal efficiencies if the modified control equipment is capable of achieving these new limits and efficiencies without great operating problems and costs. IPP should, therefore, argue that since equipment performance guarantees are based on the existing emission limits and removal efficiencies, more stringent requirements would impose unacceptable economic consequences on IPP.

New computer modeling to determine the changes in emission impacts caused by design modifications is probably not required of IPP. However, to maintain good will between IPP and the DOH and to avoid political and legal complications, it is recommended that computer modeling be performed. If the impacts are less than those predicted in June 1983 for four generating units, then no further review is needed.

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- b. Contrary to the DOH position discussed in 2.g below, the IPP could be allowed to "bank" emission reductions caused by a design modification from four to two units. This is allowed by UACR for an existing source. The emission reduction credits could be used for sale to another source or for use by IPP at some future date.

However, it is apparent that the DOH views the UACR as inadequate to protect against sources such as IPP from banking "paper" emission reductions. It is likely that the DOH may petition the Utah Air Conservation Committee (UACC) to amend the regulations to specifically prevent paper banking should IPP request to do so. As previously suggested informally to your staff, considering the status of the permit process, such a request for "banking" should be postponed indefinitely, and further discussions on this subject with Utah entities should be delayed.

## 2. Summary of the Meeting:

- a. The confidential draft IPP letter will only be available to the DOH and the UACC. The draft letter will not be available for public review.
- b. The IPP will officially become a two-generating-unit project about the end of March 1983. A modified notice of intent to construct two generating units instead of four, as originally proposed, must be submitted to the DOH. The notice of intent must be accompanied by a description of design changes (such as the increase in boiler heat input from that which was originally proposed) and followed by a new air quality computer modeling impact analysis.

It will take from 60 to 90 days (assuming the DOH does not require a 30-day extension) to process the modified Notice of Intent and issue a modified Permit to Construct and Operate or issue a Rejection Notice. A 30-day public comment period must be included as part of this procedure.

- c. The DOH has received full Prevention of Significant Deterioration (PSD) permit review authority and will be combining the DOH and Environmental Protection Agency (EPA) air quality permits into one common permit. It is now appropriate that IPP address regulatory issues to the DOH and not to EPA.

- d. The DOH considers a source of pollution as each individual generating unit and does not consider a source as all units combined. Under this interpretation, a decrease from four to two units with the corresponding decrease in total emissions will not offset an increase in individual unit emissions to eliminate full regulatory proceedings. Since each unit is a source, any increase in boiler heat input or any design modification which causes a "significant" increase in emissions per unit (40 tons/year for SO<sub>2</sub>) will result in a major modification review by the DOH, subject to all regulatory proceedings. The regulatory proceedings will include a new BACT review for control of the additional emissions and can result in a permit modification which sets more stringent emission limits and removal efficiencies to control the additional emissions. New computer modeling to estimate the new air quality emission impacts is required.
- e. The DOH does not consider IPP an existing source but rather a new source. IPP will become an existing source after the commercial start-up date (apparently each unit will become an existing source after the commercial start-up date of that unit).

Since the IPP is a new source, any design modification of the emission control equipment (including the boiler and presumably materials handling) will require a DOH and public review to determine if the control equipment affected by the modification is current BACT. However, Mr. Bradford stated that he would obtain an opinion from his legal staff to determine if the proposed control equipment modifications would be subject to present BACT standards or to the BACT standards of 1980, when the air quality approval order was issued. This review for new sources can result in lower emission limits and greater removal efficiencies due to an improvement in emission control technology since the approval order was granted.

The control equipment that the DOH wishes to review is the SO<sub>2</sub> scrubber, baghouse and the boiler. This review is triggered by the changes from lime to limestone for the scrubber, a change from an electrostatic precipitator to a baghouse, and an increase in heat input to the boilers.

- f. The DOH believes that the IPP permit will be reevaluated to determine if more stringent NO<sub>2</sub> emission control technology is warranted. This is due to an anticipated petition for reevaluation to the UACC from concerned citizens. The law firm of Ivie and Young has been retained by concerned citizens to investigate the legal avenues which are open to require more stringent emission control of IPP. Concerned citizens were granted time at the March 11, 1983 UACC public hearing (monthly scheduled) to express their concerns toward IPP. They cited a staff report of the California Air Resources Board titled "Proposed Guidelines for the Control of Emissions from Coal-Fired Power Plants".

The DOH feels that the present baghouse and scrubber designs are adequate control systems for particulates and SO<sub>2</sub> emissions, and it is unlikely (but not conclusively determined) that more stringent requirements will be imposed.

The DOH plans to perform an independent BACT analysis that will include a cost/benefit analysis which could offset any public argument for DOH approval of lower emission limits. It was pointed out that more stringent permit requirements would result in enormous additional costs to IPP.

- g. The DOH believes it cannot allow IPP to retain emission reduction credits, when the project is officially reduced from four to two generating units, without commitments for constructing Units 3 and 4 at a future date. Under the new source interpretation, emission banking cannot be used. The DOH would allow IPP to apply for a "feasibility permit", which is a delayed construction order allowing the construction of Units 3 and 4 at a future date, if sufficient commitments for construction are made at this time.

Also, if IPP can show, after the commercial start-up date, that emissions are less than those allowed in the permit, then credit may be taken for that reduction. This reduction will only be allowed if it is state-enforceable. The reduction can be used for sale or for future use by IPP.

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- h. The DOH suggested that the computer modeling methodology to estimate emission impacts and the methodology to quantify fugitive emissions be reviewed by the DOH prior to starting the impact analyses. The Department and appropriate consultant representatives will meet with the DOH as soon as practical to discuss this methodology.
- i. The Department will provide the DOH with the latest emission control equipment design specifications and the subsequent Change Orders.
- j. The Department will plan to provide the DOH with compliance testing procedures from 60 to 90 days prior to testing. Department and DOH representatives will participate in a pretest conference to discuss the testing at least 30 days prior to testing of Unit 1.
- k. The Department will plan to provide the DOH with post-construction emission impact monitoring procedures from 60 to 90 days prior to commercial start-up of Unit 1.

If you have any questions or comments, please contact Mr. Timothy L. Conkin on extension 5794.

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